

State of Missouri

Comments & Suggestions from Stakeholder Meeting on Regulatory Impact Reports January 27, 2005



Missouri Department of Natural Resources
Water Protection and Soil Conservation Division
Water Protection Program

February 4, 2005

Suggestions from Stakeholder Meeting on RIR

January 27, 2005

Regulatory Impact Report Comments

Comments: Fishable/swimmable statement should include “wherever attainable” for public’s benefit/understanding.

Actions:

- The phrase “wherever attainable” will be added as appropriate to the revised RIR.

Comments: High flow exemptions should be discussed with the Combined Sewer Overflow Systems (CSOs) and wet weather work group. This item is contained in the settlement agreement with an action date of April 30, 2006. After that date, EPA would be forced to take action. It is the intention of the work group to work parallel with the standards revisions.

Actions:

- This issue will be discussed during the CSO/wet weather work group meetings, which will occur simultaneously as the water quality revisions.

Comments: The department should do an economic analysis on mixing zones and the rulemaking effects. What are the alternatives to the approach taken? It is the department’s responsibility to list all alternatives.

Actions:

- Alternatives to the types of mixing zone have been added to the RIR.
- The explanation for the lack of economic analysis is also contained in the revised RIR.

Comments: Classification guidelines. When does a ditch become a stream? Will effluent dominated waters be addressed in the future? This rulemaking does not mention effluent dominated waters, but it will effect them.

Actions:

- Effluent dominated waters will be addressed in the future. This issue is complicated and may take longer than this rulemaking to work out. Stakeholders need to be involved in the process. This issue will be addressed within the water classification guidelines, as it remains unsettled.

Comments: Dissolved oxygen (DO) alternatives were discussed during the stakeholder meeting in 2001. Why were the proposed criteria not included in this rulemaking? The department should include alternatives that were discussed. The department proposed criteria in response to EPA’s September 8, 2000, letter. The criteria were based on EPA’s 1986 DO criteria document. A change of course needs an explanation. The department’s suggested criteria were not protective of aquatic life. Define “natural” conditions.

Actions:

- The issues identified by EPA in their letter to the department will be addressed in the next triennial review. The 1986 DO criterion document published by EPA has information on the specific concentrations for different aquatic life groups (e.g., cold water, warm water).
- Due to information received from concerned parties and internal discussions, this issue was put on hold until further stakeholder discussions could be accomplished.
- Staff will attempt to further define “natural” conditions.

Suggestions from Stakeholder Meeting on RIR

January 27, 2005

Comments: Site-specific criteria put the burden of proof on the regulated community. “Not protective” is misleading. EPA has methods for site-specific criteria; therefore, the department does not need to include site-specific methods. The only change that needed to be made is “natural” to “non-anthropogenic.” In a different section of EPA’s letter, they suggest that the department develop site-specific criteria methods.

Actions:

- In order to provide a clear approach to establishing site-specific criteria, language was added. This was a suggestion by EPA.

Comments: The department should consider more than one alternative.

Actions:

- When revising water quality criteria, the department has two options:
 - (1) Develop criteria based on conditions in Missouri using EPA’s recommended methods or an alternative but scientifically defensible method, or
 - (2) Adopt EPA’s recommended criteria.
- The department does not have the staff or resources to establish new criteria or to review EPA’s science and related administrative records. Staff relies on EPA’s science without question since it has been developed by individuals familiar with establishing criteria and peer-reviewed by the nation.
- Staff will identify specific sections and/or page numbers for the reference documents.

Comments: Benefits need to be listed to justify rulemaking. Alternatives exist in how the state implements EPA requirements. For example, list all classified waters for WBCR now or establish a phased approach. Look at benefits to the state if WBCR designations were implemented in 1983. Determine probable cost to the state. Alternatives do make a difference when they are known. Cost needs to be determined for agricultural sector also. Insure all options/costs to agency are explored, including 303(d) listings.

Actions:

- Benefits and alternatives will be added to the revised RIR.
- Three scenarios are being developed for the disinfection requirement.

Rule Comments

Comments: Does the site-specific criteria exist for anthropogenic conditions?

Actions:

- Staff will explore this option.
- Should a condition exist that has been caused by human activity but cannot be remedied or is effected by widespread economic impacts, a UAA may be possible.

Comment: The analytical method for drinking water supply (DWS) metals should all be total recoverable.

Action:

- The draft rule will be changed to indicate all DWS metals should be analyzed using a total recoverable method.

Suggestions from Stakeholder Meeting on RIR
January 27, 2005

Comments: Return fisheries types (e.g., cold water fishery, warm water fishery) back to Table A. Explore criteria based on fishery types. At a minimum, separate out cold water fishery (CDF). Cadmium must include all trout species in the criteria equation.

Actions:

- Staff will research this issue.
- Discussions with EPA will continue to determine why the equation staff calculated will not be adequate. Changes will be made accordingly.

Comments: Cadmium, lead, and zinc can often be found together in Missouri. These metals may separately meet water quality standards, but together can cause adverse effects to aquatic life. Actual criteria may not protect Missouri streams. Maybe add a footnote about synergistic effects. Some of the criteria are below background conditions. Is copper that leaches from household pipes considered background?

Actions:

- A footnote will be added to make individuals aware of the possible synergistic effect of pollutants in the water.
- As stated before, the department must adopt EPA criteria or provide scientifically defensible methods to determine state criteria. The department, at this time, chose to adopt EPA's recommended criteria, since no state specific criteria exist.
- Should certain areas in Missouri be naturally below the criteria listed in Table A, site-specific criteria could be developed for that specific location.

Comments: What other waters need revisions to CDF designation?

Actions:

- Any discrepancies beyond those EPA suggested in Table C—Cold water fisheries will be looked at during the next triennial review.

Comments: If a community no longer uses a water for drinking water, the DWS designation should not exist.

Actions:

- The department is looking into this issue.
- A Use Attainability Analysis (UAA) will need to be developed and completed for DWS designated use removal.

Comments: In the designation of WBCR, how are nonpoint sources addressed?

Actions:

- Nonpoint source pollution is addressed through best management practices (BMP), which are voluntary.

Suggestions from Stakeholder Meeting on RIR January 27, 2005

Comments: Criteria for DWS are the same as what drinking water treatment plants treat for potable water. Wastewater treatment facilities (WWTFs) do not have the same technology. These criteria are basically requiring a drinking water plant at the end of the WWTF. Is in-stream water considered potable? Trihalomethane (THM) criteria can be treated and should not be at raw water level. Has atrazine criteria for raw water supplies been investigated?

Actions:

- Historically the department has adopted Safe Drinking Water Act (SDWA) Maximum Contaminant Levels (MCLs) for DWS criteria. When no MCL has been established, the department has adopted EPA's recommended 304(a) organism plus water criteria. Typically, MCL values are less stringent than 304(a) criteria. Below are tables of the department's current criteria, MCLs, and 304(a) criteria.

Table 1. Priority Pollutants

EPA #	CAS #	Pollutant (µg/l)	WQS Table A	SDWA MCL	1999 EPA 304(a) Criteria	2002 EPA 304(a) Criteria
PP #031	78875	1,2-dichloropropane	100	5	0.52	0.50
PP #016	1746016	2,3,7,8-TCDD (dioxin)	.00003	0.00003	0.000000013	0.000000005
PP #110	72548	4-4'-DDD	---	---	0.00083	0.00031
PP #109	72559	4-4'-DDE	---	---	0.00059	0.00022
PP #108	50293	4-4'-DDT [and metabolites]	.002	---	0.00059	0.00022
PP #020	75252	Bromoform (THM)	---	80 ¹	4.30	4.30
PP #023	124481	Chlorodibromomethane (THM)	---	80 ¹	0.41	0.40
PP #026	67663	Chloroform (THM)	---	80 ¹	5.70	5.70
PP #027	75274	Dichlorobromomethane (THM)	---	80 ¹	0.56	0.55
PP #036	75092	Methylene Chloride	5	---	4.70	4.60
PP #038	127184	Tetrachloroethylene	5	5	0.80	0.69
---	---	Trihalomethanes (THM)	100	80 ¹	---	---

¹ 1998 Final Rule for Disinfectants and Disinfection By-products: The total for trihalomethanes is 80 µg/L.

Table 2. Non-Priority Pollutants.

EPA #	CA #	Pollutant (µg/l)	WQS Table A	SDWA MCL	1999 EPA 304(a) Criteria	2002 EPA 304(a) Criteria
NPP #43	95943	1,2,4,5-tetrachlorobenzene	38	---	2.3	0.97
NPP #15	542881	Bis (chloromethyl) ether	0.00016	---	0.00013	0.00010
NPP #34	608935	pentachlorobenzene	74	---	3.5	1.40

Comments: Applying Tier 3 antidegradation to the watershed of outstanding resource waters is beyond the requirement of EPA. No discharge to the outstanding national resource waters (ONRW) and their watersheds should be allowed. ONRWs are located in Karst areas so protection should remain for the entire watershed. No discharge should occur in ONRWs while no lowering of water quality should exist in the watershed. The department should re-examine wording. Does rule prohibit discharges directly to ONRW?

Actions:

- Current language in the Effluent Regulations (ER) states that section 6 applies to "limits for Wild and Scenic Rivers and Ozark National Scenic Riverways and Drainages Thereto." Staff extending that same protection to OSRW.
- Staff will look into this issue.

Suggestions from Stakeholder Meeting on RIR January 27, 2005

Comments: Is the recreational uses considered a tiered approach? Will boating and canoeing (BTG) be default when whole body contact recreation (WBCR) is found to not exist by the UAA process?

Actions:

- WBCR will be designated separately from BTG. BTG use will be assigned as it is identified through the UAA process. BTG will not be default.

Comments: The title of “Boating and canoeing” is inappropriate and should be revised. “Secondary contact recreation” is an option. The types of activity under BTG should be revised. Kayaking is a whole body contact recreational sport. “Intent” should not be in the definition since water submersion is accidental. The definition needs to be reworded. The definition should be based on the risk to human health from submersion.

Actions:

- The title of BTG will be renamed to secondary contact recreation, following the language that many states and EPA use.
- The definition of each recreational use and the activities associated with each will be reviewed.

Comments: EPA guidance allows for bacterial indicator criteria to be based on 8 to 14 illnesses per 1,000 swimmers. Tiered standards should be developed based on frequency of use within the designation of WBCR.

Actions:

- A tiered approach within the WBCR designated use could be developed based on frequency of use (e.g., beaches, waters flowing through private property). Should this approach be taken, these locations would have to be identified. EPA sets out bacteria indicator criteria in this instance.

Comments: Mixing zone language should be examined. Maybe state “Class C streams and **classified** streams...” Could different beneficial uses be assigned in effluent dominated streams than non-effluent dominated streams due to distinct biotic assemblages? All mixing zones should be eliminated for all waters of the state. Language should be added to general criteria to eliminate confusion of whether mixing zones apply to unclassified waters.

Actions:

- Implementation of mixing zones needs to be established, especially in how they apply to effluent dominated waters.
- Mixing zones are based on flow only, not classification, when applied to effluent limits. Revised language will be suggested to clarify this rule.

Suggestions from Stakeholder Meeting on RIR January 27, 2005

Comments: High flow exemption. Reference climatic data to ensure credible data regarding rain events are looked at. No state has an approved high flow exemption. Site-specific exemptions are allowed. Kansas will publish another attempt on defining a high flow exemption soon. Need a work group on this issue and include EPA in the discussion. Concern that bacteria levels remain high for an extended time period after the initial rain event. Cities have concern about CSOs and wet weather issues. Can this discussion be done concurrently with the rule revisions? Watch how newly issued permits and those permits close to issuance will be dealt with.

Actions:

- Options for high flow exemptions will be discussed as part of the CSO/wet weather group. These discussions will be parallel to the general WQS discussions.

General Comments

Comment: Why was Ash Slough Ditch deleted in Table I? What reference waters will represent the Boothill region?

Action:

- The department is currently working with Arkansas on reference waters. Staff will research why Ash Slough Ditch is being proposed for deletion.

Comments: Default specific criteria and designated uses need to be established for the protection of unclassified waters. Make unclassified waters consistent with federal law. Maybe this issue falls under the Antidegradation Implementation Procedure.

Actions:

- Unclassified waters will be discussed during the next triennial review.

Comment: Define “zones of passage” on page 8 of the WQS.

Action:

- Zone of passage as they related to mixing zones is currently defined at 10 CSR 20-7.031(1)/W/(DD) as “a continuous water route necessary to allow passage of organisms with no acutely toxic effects produced on their populations.”

Comments: Outstanding State Resource Waters (OSRWs) determination should not be based on location within or next to public land. Do away with this third restriction.

Action:

- This issue will need to be brought before the Clean Water Commission.

How is follow-up going to be dealt with?

- Have final draft RIR based on comments for Feb. 4 meeting.
- Documents on the web will be dated. Also documents for each meeting will state which workgroup session it came from.